

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/671,317
Source: 1Fwo
Date Processed by STIC: 11/12/04

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IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/671,317

DATE: 11/12/2004
TIME: 16:50:48

Input Set : A:\STK-010C3.ST25.txt
Output Set: N:\CRF4\11122004\J671317.raw

3 <110> APPLICANT: Oppermann, Herman
 4 Kuberasampath, Thangavel
 5 Rueger, David
 6 Ozkaynak, Engin
 8 <120> TITLE OF INVENTION: Osteogenic Devices
 10 <130> FILE REFERENCE: STK-010C3
 12 <140> CURRENT APPLICATION NUMBER: US 10/671,317
 13 <141> CURRENT FILING DATE: 2003-09-25
 15 <150> PRIOR APPLICATION NUMBER: US 09/956,582
 16 <151> PRIOR FILING DATE: 2001-09-19
 18 <150> PRIOR APPLICATION NUMBER: US 09/074,299
 19 <151> PRIOR FILING DATE: 1998-05-07
 21 <150> PRIOR APPLICATION NUMBER: US 08/417,071
 22 <151> PRIOR FILING DATE: 1995-04-04
 24 <150> PRIOR APPLICATION NUMBER: US 08/145,812
 25 <151> PRIOR FILING DATE: 1993-11-01
 27 <150> PRIOR APPLICATION NUMBER: US 07/995,345
 28 <151> PRIOR FILING DATE: 1989-12-22
 30 <150> PRIOR APPLICATION NUMBER: US 07/315,342
 31 <151> PRIOR FILING DATE: 1989-02-23
 33 <150> PRIOR APPLICATION NUMBER: US 07/232,630
 34 <151> PRIOR FILING DATE: 1988-08-15
 36 <150> PRIOR APPLICATION NUMBER: US 07/179,406
 37 <151> PRIOR FILING DATE: 1988-04-08
 39 <160> NUMBER OF SEQ ID NOS: 72
 41 <170> SOFTWARE: PatentIn version 3.3
 43 <210> SEQ ID NO: 1
 44 <211> LENGTH: 96
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Artificial Sequence
 48 <220> FEATURE:
 49 <223> OTHER INFORMATION: Biosynthetic Protein COP5
 51 <400> SEQUENCE: 1
 53 Leu Tyr Val Asp Phe Ser Asp Val Gly Trp Asp Asp Trp Ile Val Ala
 54 1 5 10 15
 57 Pro Pro Gly Tyr Gln Ala Phe Tyr Cys His Gly Glu Cys Pro Phe Pro
 58 20 25 30
 61 Leu Ala Asp His Phe Asn Ser Thr Asn His Ala Val Val Gln Thr Leu
 62 35 40 45
 65 Val Asn Ser Val Asn Ser Lys Ile Pro Lys Ala Cys Cys Val Pro Thr
 66 50 55 60
 69 Glu Leu Ser Ala Ile Ser Met Leu Tyr Leu Asp Glu Asn Glu Lys Val
 70 65 70 75 80

R 6

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73 Val Leu Lys Asn Tyr Gln Glu Met Val Val Glu Gly Cys Gly Cys Arg
74 85 90 95
 77 <210> SEQ ID NO: 2
 78 <211> LENGTH: 96
 79 <212> TYPE: PRT
 80 <213> ORGANISM: Artificial Sequence
 82 <220> FEATURE:
 83 <223> OTHER INFORMATION: Biosynthetic protein COP7
 85 <400> SEQUENCE: 2
 87 Leu Tyr Val Asp Phe Ser Asp Val Gly Trp Asn Asp Trp Ile Val Ala
 88 1 5 10 15
 91 Pro Pro Gly Tyr His Ala Phe Tyr Cys His Gly Glu Cys Pro Phe Pro
 92 20 25 30
 95 Leu Ala Asp His Leu Asn Ser Thr Asn His Ala Val Val Gln Thr Leu
 96 35 40 45
 99 Val Asn Ser Val Asn Ser Lys Ile Pro Lys Ala Cys Cys Val Pro Thr
 100 50 55 60
 103 Glu Leu Ser Ala Ile Ser Met Leu Tyr Leu Asp Glu Asn Glu Lys Val
 104 65 70 75 80
 107 Val Leu Lys Asn Tyr Gln Glu Met Val Val Glu Gly Cys Gly Cys Arg
 108 85 90 95
 111 <210> SEQ ID NO: 3
 112 <211> LENGTH: 97
 113 <212> TYPE: PRT
 114 <213> ORGANISM: Artificial Sequence
 116 <220> FEATURE:
 117 <223> OTHER INFORMATION: endochondral bone formation inducing protein
 120 <220> FEATURE:
 121 <221> NAME/KEY: misc_feature
 122 <222> LOCATION: (2)..(2) /
 123 <223> OTHER INFORMATION: wherein Xaa at position 2 can be any amino acid
 125 <220> FEATURE:
 126 <221> NAME/KEY: misc_feature /
 127 <222> LOCATION: (4)..(4) /
 128 <223> OTHER INFORMATION: wherein Xaa at position 4 can be any amino acid
 130 <220> FEATURE:
 131 <221> NAME/KEY: misc_feature /
 132 <222> LOCATION: (6)..(6) /
 133 <223> OTHER INFORMATION: wherein Xaa at position 6 can be any amino acid
 135 <220> FEATURE:
 136 <221> NAME/KEY: misc_feature /
 137 <222> LOCATION: (8)..(8) /
 138 <223> OTHER INFORMATION: wherein Xaa at postion 8 can be any amino acid
 140 <220> FEATURE:
 141 <221> NAME/KEY: misc_feature /
 142 <222> LOCATION: (11)..(11) /
 143 <223> OTHER INFORMATION: wherein Xaa at position 11 can be any amino acid
 145 <220> FEATURE:
 146 <221> NAME/KEY: misc_feature /

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Input Set : A:\STK-010C3.ST25.txt
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147 <222> LOCATION: (12)..(12)
148 <223> OTHER INFORMATION: wherein Xaa at position 12 can be any amino acid
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: (14)..(14)
153 <223> OTHER INFORMATION: wherein Xaa at position 14 can be any amino acid
155 <220> FEATURE:
156 <221> NAME/KEY: misc_feature
157 <222> LOCATION: (15)..(15)
158 <223> OTHER INFORMATION: wherein Xaa at position 15 can be any amino acid
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <222> LOCATION: (16)..(16)
163 <223> OTHER INFORMATION: wherein Xaa at position 16 can be any amino acid
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature
167 <222> LOCATION: (18)..(18)
168 <223> OTHER INFORMATION: wherein Xaa at position 18 can be any amino acid
170 <220> FEATURE:
171 <221> NAME/KEY: misc_feature
172 <222> LOCATION: (20)..(20)
173 <223> OTHER INFORMATION: wherein Xaa at position 20 can be any amino acid
175 <220> FEATURE:
176 <221> NAME/KEY: misc_feature
177 <222> LOCATION: (21)..(21)
178 <223> OTHER INFORMATION: wherein Xaa at position 21 can be any amino acid
180 <220> FEATURE:
181 <221> NAME/KEY: misc_feature
182 <222> LOCATION: (23)..(23)
183 <223> OTHER INFORMATION: wherein Xaa at position 23 can be any amino acid
185 <220> FEATURE:
186 <221> NAME/KEY: misc_feature
187 <222> LOCATION: (26)..(26)
188 <223> OTHER INFORMATION: wherein Xaa at position 26 can be any amino acid
190 <220> FEATURE:
191 <221> NAME/KEY: misc_feature
192 <222> LOCATION: (28)..(28)
193 <223> OTHER INFORMATION: wherein Xaa at position 28 can be any amino acid
195 <220> FEATURE:
196 <221> NAME/KEY: misc_feature
197 <222> LOCATION: (30)..(31)
198 <223> OTHER INFORMATION: wherein Xaa at positions 30-31 can be any amino acid
200 <220> FEATURE:
201 <221> NAME/KEY: misc_feature
202 <222> LOCATION: (33)..(40)
203 <223> OTHER INFORMATION: wherein Xaa at positions 33-40 can be any amino acid
205 <220> FEATURE:
206 <221> NAME/KEY: misc_feature
207 <222> LOCATION: (44)..(45)

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Input Set : A:\STK-010C3.ST25.txt
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208 <223> OTHER INFORMATION: wherein Xaa at position 44-45 can be any amino acid
210 <220> FEATURE:
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212 <222> LOCATION: (47)..(48) /
213 <223> OTHER INFORMATION: wherein Xaa at position 47-48 can be any amino acid .
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature /
217 <222> LOCATION: (50)..(52)
218 <223> OTHER INFORMATION: wherein Xaa at position 50-52 can be any amino acid
220 <220> FEATURE:
221 <221> NAME/KEY: misc_feature /
222 <222> LOCATION: (54)..(57)
223 <223> OTHER INFORMATION: wherein Xaa at position 54-57 can be any amino acid
225 <220> FEATURE:
226 <221> NAME/KEY: misc_feature /
227 <222> LOCATION: (59)..(60)
228 <223> OTHER INFORMATION: wherein Xaa at positions 59-60 can be any amino acid .
230 <220> FEATURE:
231 <221> NAME/KEY: misc_feature /
232 <222> LOCATION: (63)..(63)
233 <223> OTHER INFORMATION: wherein Xaa at position 63 can be any amino acid
235 <220> FEATURE:
236 <221> NAME/KEY: misc_feature /
237 <222> LOCATION: (65)..(72)
238 <223> OTHER INFORMATION: wherein Xaa at position 65-72 can be any amino acid
240 <220> FEATURE:
241 <221> NAME/KEY: misc_feature /
242 <222> LOCATION: (74)..(74)
243 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
245 <220> FEATURE:
246 <221> NAME/KEY: misc_feature /
247 <222> LOCATION: (75)..(80)
248 <223> OTHER INFORMATION: wherein Xaa at position 75-80 can be any amino acid
250 <220> FEATURE:
251 <221> NAME/KEY: misc_feature /
252 <222> LOCATION: (82)..(82)
253 <223> OTHER INFORMATION: wherein Xaa at position 82 can be any amino acid
255 <220> FEATURE:
256 <221> NAME/KEY: misc_feature .
257 <222> LOCATION: (84)..(85)
258 <223> OTHER INFORMATION: wherein Xaa at positions 84-85 can be any amino acid
260 <220> FEATURE:
261 <221> NAME/KEY: misc_feature /
262 <222> LOCATION: (87)..(88)
263 <223> OTHER INFORMATION: wherein Xaa at positions 87-88 can be any amino acid
265 <220> FEATURE:
266 <221> NAME/KEY: misc_feature /
267 <222> LOCATION: (90)..(90)
268 <223> OTHER INFORMATION: wherein Xaa at position 90 can be any amino acid

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Input Set : A:\STK-010C3.ST25.txt

Output Set: N:\CRF4\11122004\J671317.raw

270 <220> FEATURE:
 271 <221> NAME/KEY: misc_feature
 272 <222> LOCATION: (92)..(93)
 273 <223> OTHER INFORMATION: wherein Xaa at positions 92-93 can be any amino acid
 275 <220> FEATURE:
 276 <221> NAME/KEY: misc_feature
 277 <222> LOCATION: (95)..(95)
 278 <223> OTHER INFORMATION: wherein Xaa at position 95 can be any amino acid
 280 <220> FEATURE:
 281 <221> NAME/KEY: misc_feature
 282 <222> LOCATION: (97)..(97)
 283 <223> OTHER INFORMATION: wherein Xaa at position 97 can be any amino acid
 285 <400> SEQUENCE: 3

W--> 287 Leu Xaa Val Xaa Phe Xaa Asp Xaa Gly Trp Xaa Xaa Trp Xaa Xaa Xaa
 288 1 5 10 15
 291 Pro Xaa Gly Xaa Xaa Ala Xaa Tyr Cys Xaa Gly Xaa Cys Xaa Xaa Pro.
 292 20 25 30
 295 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asn His Ala Xaa Xaa Gln Xaa Xaa
 296 35 40 45
 299 Val Xaa Xaa Xaa Asn Xaa Xaa Xaa Pro Xaa Xaa Cys Cys Xaa Pro
 300 50 55 60
 303 Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 304 65 70 75 80
 307 Val Xaa Leu Xaa Xaa Tyr Xaa Xaa Met Xaa Val Xaa Xaa Cys Xaa Cys
 308 85 90 95
 311 Xaa
 315 <210> SEQ ID NO: 4
 316 <211> LENGTH: 102
 317 <212> TYPE: PRT
 318 <213> ORGANISM: Artificial Sequence
 320 <220> FEATURE:
 321 <223> OTHER INFORMATION: endochondral bone formation inducing protein
 324 <220> FEATURE:
 325 <221> NAME/KEY: misc_feature
 326 <222> LOCATION: (2)..(5)
 327 <223> OTHER INFORMATION: wherein Xaa at positions 2-5 can be any amino acid
 329 <220> FEATURE:
 330 <221> NAME/KEY: misc_feature
 331 <222> LOCATION: (7)..(7)
 332 <223> OTHER INFORMATION: wherein Xaa at position 7 can be any amino acid
 334 <220> FEATURE:
 335 <221> NAME/KEY: misc_feature
 336 <222> LOCATION: (9)..(9)
 337 <223> OTHER INFORMATION: wherein Xaa at position 9 can be any amino acid
 339 <220> FEATURE:
 340 <221> NAME/KEY: misc_feature
 341 <222> LOCATION: (11)..(11)
 342 <223> OTHER INFORMATION: wherein Xaa at position 11 can be any amino acid
 344 <220> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY
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Input Set : A:\STK-010C3.ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 2,4,6,8,11,12,14,15,16,18,20,21,23,26,28,30,31,33,34,35,36
Seq#:3; Xaa Pos. 37,38,39,40,44,45,47,48,50,51,52,54,55,56,57,59,60,63,65
Seq#:3; Xaa Pos. 66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,82,84,85,87,88
Seq#:3; Xaa Pos. 90,92,93,95,97
Seq#:4; Xaa Pos. 2,3,4,5,7,9,11,13,16,17,19,20,21,23,25,26,28,31,33,35,36
Seq#:4; Xaa Pos. 38,39,40,41,42,43,44,45,49,50,52,53,55,56,57,59,60,61,62
Seq#:4; Xaa Pos. 64,65,68,70,71,72,73,74,75,76,77,79,80,81,82,83,84,85,87
Seq#:4; Xaa Pos. 89,90,92,93,95,97,98,100,102
Seq#:5; Xaa Pos. 2,4,6,8,11,12,14,15,16,18,20,21,23,26,28,30,31,33,34,35,36
Seq#:5; Xaa Pos. 37,38,39,40,44,45,47,48,50,51,52,54,55,56,57,59,60,63,66
Seq#:5; Xaa Pos. 67,68,69,70,71,72,73,75,76,77,78,79,80,81,83,85,86,87,88
Seq#:5; Xaa Pos. 89,91,92,93,95
Seq#:6; Xaa Pos. 2,3,4,5,7,10,12,15,16,18,19,20,22,24,25,27,30,32,34,35,37
Seq#:6; Xaa Pos. 38,39,40,41,42,43,44,48,49,51,52,54,55,56,58,59,60,61,63
Seq#:6; Xaa Pos. 64,67,70,71,72,73,74,75,76,77,79,80,81,82,83,84,85,87,89
Seq#:6; Xaa Pos. 90,91,92,93,95,96,97,98,100
Seq#:30; Xaa Pos. 15
Seq#:31; Xaa Pos. 4,10
Seq#:32; Xaa Pos. 15,16
Seq#:33; Xaa Pos. 2
Seq#:35; Xaa Pos. 13,16
Seq#:36; Xaa Pos. 19
Seq#:37; Xaa Pos. 12,14,17,18
Seq#:38; Xaa Pos. 2,8,10,12,13,19,21,22
Seq#:52; Xaa Pos. 93

VERIFICATION SUMMARY
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Input Set : A:\STK-010C3.ST25.txt
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L:287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
M:341 Repeated in SeqNo=3
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
M:341 Repeated in SeqNo=4
L:875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
M:341 Repeated in SeqNo=5
L:1381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
M:341 Repeated in SeqNo=6
L:1995 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:2020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:2040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:2064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:2107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:2135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16
L:2165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
M:341 Repeated in SeqNo=37
L:2219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
M:341 Repeated in SeqNo=38
L:2846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:80